

In the Claims:

1. (Currently Amended) An earth-boring bit, comprising:
  - a bit body;
  - a cantilevered bearing pin depending from the bit body;
  - a cone mounted for rotation on the bearing pin; and
  - a bearing surface between the cone and the bearing pin, the bearing surface being formed of a steel alloy and having a DLC diamond-like coating formed thereon.
2. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating has a thickness in the range from 1 to 10 micrometers.
3. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating has a thickness in the range from 2 to 5 micrometers.
4. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating has a thickness in the range from 2 to 3 micrometers.
5. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating has a Knoop Scale hardness in the range from 2000 to 5000.
6. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating is of carbon with a mixture of sp<sub>3</sub> and sp<sub>2</sub> bonds between atoms of the carbon.

7. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating is formed of amorphous and hydrogenated amorphous carbon.

8. (Currently Amended) The bit according to claim 1, wherein the DLC diamond-like coating is doped with an alloying element from the group consisting essentially of silicon, boron and boron nitride and a refractory metallic element from the group consisting essentially of tantalum, titanium, tungsten, niobium and zirconium.

9. (Currently Amended) The bit according to claim 1, further comprising a thrust washer formed of the steel alloy and located between a thrust shoulder of the bearing pin and the cone, the bearing surface containing the DLC diamond-like coating being on at least one side of the thrust washer.

10. (Currently Amended) The bit according to claim 1, further comprising a sleeve formed of the steel alloy and located between the bearing pin and the cone, the bearing surface containing the DLC diamond-like coating being on at least one side of the sleeve.

11. (Currently Amended) The bit according to claim 1, further comprising a single thrust washer located between having one side in contact with a thrust shoulder formed on the bearing pin and another side in contact with a thrust surface formed in the cone, and a single sleeve located between having one side in contact with the bearing pin and another side in contact with the cone, the bearing surface containing the DLC diamond-like coating being on at least one of the side sides of the thrust washer and on at least one side of the sides of the sleeve.

12. (Currently Amended) The bit according to claim 1, wherein the bearing surface having the DLC diamond-like coating is formed on a journal surface of the bearing pin.

13. (Currently Amended) The bit according to claim 1, wherein the bearing surface having the DLC diamond-like coating is formed within a cavity of the cone.

14. (Currently Amended) An earth-boring bit, comprising:

a bit body;

a cantilevered bearing pin depending from the bit body, the bearing pin having a thrust shoulder that is in a plane perpendicular to the axis of the bearing pin;

a cone mounted for rotation on the bearing pin, the cone having a thrust shoulder facing toward the thrust shoulder of the bearing pin; and

a single thrust washer located between and having opposite sides in engagement with the thrust shoulders of the bearing pin and the cone, the thrust washer being formed of a steel alloy and having a DLC diamond-like coating formed thereon on at least one of the side sides.

15. (Currently Amended) The bit according to claim 14, wherein the DLC diamond-like coating is formed on both sides of the thrust washer.

16. (Currently Amended) The bit according to claim 14, wherein the thrust shoulder of the bearing pin is formed of a steel alloy and contains an inlay of a hard wear resistant material.

17. (Currently Amended) The bit according to claim 14, wherein the thrust shoulder of the bearing pin is formed of a steel alloy and has a DLC diamond-like coating formed thereon.

18. (Original) The bit according to claim 14, wherein the coating is of carbon with a mixture of sp3 and sp2 bonds between atoms of the carbon.

19. (Original) The bit according to claim 14, wherein the coating is formed of amorphous and hydrogenated amorphous carbon.

20. (Currently Amended) The bit according to claim 14, wherein the DLC diamond-like coating is doped with an alloying element from the group consisting essentially of silicon, boron and boron nitride and a refractory metallic element from the group consisting essentially of tantalum, titanium, tungsten, niobium and zirconium.

21. (Currently Amended) An earth-boring bit, comprising:

a bit body;

a cantilevered bearing pin depending from the bit body;

a cone mounted for rotation on the bearing pin; and

a single sleeve located between having an inner diameter side in contact with the bearing pin and an outer diameter side in contact with a cavity surface in the cone, the sleeve being formed of a steel alloy and having a DLC diamond-like coating formed thereon that is on at least one of the side sides.

22. (Currently Amended) The bit according to claim 21, wherein the DLC diamond-like coating is on both sides of the sleeve.

23. (Currently Amended) The bit according to claim 21, wherein the bearing pin is formed of a steel alloy and also contains a DLC diamond-like coating.

24. (Currently Amended) The bit according to claim 21, wherein the cone is formed of a steel alloy, and the cavity surface of the cone also contains a DLC diamond-like coating.